CONCENTRATED ANIMAL FEEDING OPERATION (CAFO)

AMENDED FACT SHEET

National Pollutant Discharge Elimination System (NPDES)
and State Waste Discharge General Permit

June 21, 2006

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This fact sheet summarizes the regulatory basis of the concentrated animal feeding operation (CAFO) permit. It also describes the decisions made in the permit. This permit affects facilities that are required to be permitted or decide to seek permit coverage.

During the writing of this draft permit, the Federal 2nd Circuit Court had a significant court ruling on the Environmental Protection Agency's 2002 CAFO Rules. While the court denied many aspects against the petitioners, some of the courts decisions have an impact on this permit.

The rulings that affected this permit are:

Permitting Scheme

Failure to Regulate
The CAFO Rule was found unlawful because it allowed National Pollutant Discharge Elimination System (NPDES) permitting authorities to issue permits to large CAFOs in the absence of any meaningful review of the nutrient management plans those CAFOs have developed. The court requires governmental oversight of the nutrient management plans.

Technology-based Effluent Limitation Guidelines
Further, the CAFO Rule was ruled unlawful because it failed to require the terms of the nutrient management plans to be included in the NPDES permits. Nutrient management plans were determined to be *"technology-based Effluent Limitation Guidelines"* (BAT) and required to be made available for public review.

Duty to Apply
The court ruled unless there is a "discharge of any pollutant" there cannot be a requirement to obtain a permit. The Environmental Protection Agency (EPA) can only regulate actual and proposed discharges not potential discharges.

Discharges Subject to Regulation

Agricultural Stormwater Discharges
The Clean Water Act carves out an exception for an agricultural storm water discharge, making these discharges exempt from regulation. However, the court ruled uncollected discharges from land areas under the control of the CAFO can be regulated as point source of pollution if the application of manure, litter or wastewater was not applied at agronomic rates.

A. Activity

The definition of an Animal Feeding Operation (AFO) means a lot or facility that meets all of the following conditions:

(a) It has animals (other than aquatic animals *see appendix 1*) that have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period and

(b) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility where animals are confined.

Incidental vegetation in a clear area of confinement, such as a feedlot or pen, would not exclude an operation from meeting the definition of an AFO.

In the case of a winter feedlot, the "no vegetation" criterion in the AFO definition is meant to be evaluated during the winter, when the animals are confined. Therefore, use of a winter feedlot to grow crops or other vegetation during periods of the year when animals are not confined would not exclude the feedlot from meeting the definition of an AFO.

The definition of a "Concentrated Animal Feeding Operation (CAFO)" means an AFO that meets *one* or more of the following criteria:

(a) An AFO where the number of animals meets or exceeds the numbers for a Large AFO from Appendix 1, or

(b) An AFO where the number of animals present is in the medium range from Appendix 1 *and there is* a discharge to waters of the state, or

(c) An AFO where the number of animals present is less than that of a Large AFO *and* the department has designated the facility as a CAFO

The definition of a CAFO is in the definitions and in appendix 1 of the permit. The definition is from the federal regulations and court decision (40 CFR 122.23), and is based on the number of animals at the facility and whether or not they are discharging. CAFOs only need to be permitted if they discharge or propose to discharge to waters of the state.

B. Geographic Area

This permit applies to the entire state of Washington. There are AFOs and CAFOs throughout the state however, some areas have larger numbers and different types of operations. CAFOs in different parts of the state face different challenges in protecting water quality in both the production area and field application area. For example, in northwest Washington, ground water tends to be shallow, which can make it more difficult to protect ground water sources. Western Washington in general receives more rain water than eastern Washington , which causes some differences in management practices. These geographic differences across the state is one reason why the permit relies on site-specific nutrient management plans.

C. Applicants

Any CAFO that is discharging or proposing to discharge to waters of the state is required to obtain coverage under this general permit or obtain an individual permit. This requirement is in the federal rules.

AFOs and CAFOs may seek coverage under the permit. A general discharge permit is written to cover similar types of discharges from similar activities. An individual discharge permit is tailored to address specific issues for an individual operation. CAFOs that require site-specific conditions to protect water quality may need to be issued individual permits.

Section 301(a) of the Federal Clean Water Act (CWA) provides that the discharge of pollutants from point sources, including CAFOs, to surface waters is unlawful except in accordance with an NPDES permit. The State Water Pollution Control Act, RCW 90.48.160, requires any person who conducts a commercial or industrial operation which results in the disposal of liquid or solid waste material into waters of the state to obtain a permit. Waters of the state, defined in RCW 90.48.020, include both surface and ground waters.

D. Facilities

There are an estimated 161 Large CAFOs in Washington. There are an estimated 546 medium animal feeding operations, with some of those likely meeting the definition of Medium CAFOs

Animal Type	Estimated Number of *Large CAFOs	Estimated Number of Medium Animal Feeding Operations (*some percentage could be Medium CAFOs*)**
Horses	1	7
Sheep or Lambs	3	14
Ducks	0	1
Dairy cows	94	234
Other Cattle	30	225
Swine each weighing 55 pounds or more	0	11
Swine each weighing less than 55 pounds	0	3
Laying hens	13	2
Chickens (other than laying hens)	24	49

*Large CAFOs are CAFOs but only need to apply for a permit if they discharge or propose to discharge pollutants to waters of the state.
** Medium animal feeding operations only meet the definition of CAFOS and need to apply for a permit if they discharge pollutants to waters of the state.

E. Application for Coverage

A facility must submit a completed application with a nutrient management plan to apply for coverage under the general permit. An application is not complete unless a nutrient management plan is included. The Department will verify the plans conform to the United States Department of Agriculture Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG) or equivalent best management practices (BMPs). The Department can use the Washington State Department of Agriculture, local conservations districts or other qualified organizations to help verify plans accuracy. When they occur, nutrient management plan updates to the must be submitted to the Department.

The application is available on Ecology's webpage at www.ecy.wa.gov/programs/wq/permits/cafo.
Unless the Department notifies the applicant in writing to the contrary, coverage under this general permit will begin on the later of the following:

- The thirty-first (31st) day after the Department receives the applicant's completed application for coverage,
- The thirty-first (31st) day after the end of the thirty (30) day public comment period required by WAC 176-226-130(4), or
- The effective date of the general permit.

If the application is incomplete, an appeal has been filed, public comments have been received, or more information is necessary to determine whether a facility requires coverage under the general permit, additional time may be required to review the application. If the nutrient management plan submitted with the application does not meet the requirements of the permit, the application is not complete and will be returned. When additional time is required:

- Ecology will notify the applicant in writing and identify the issues that must be resolved before a decision can be reached.
- Ecology will send the final decision to the applicant in writing. If the application for coverage is approved, coverage begins the thirty-first (31^{st}) day after approval.

F. Effluent Characteristics of the Discharge

Process wastewater and manure are the primary wastes being regulated under this permit. Process wastewater means water directly or indirectly used in the operation of the CAFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other CAFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.

Process wastewater and manure are generated in the animal confinement area. It is stored throughout the non-growing season. Adequate storage must be available to manage manure and wastewater when precipitation and soil conditions do not allow land application. During the growing season, process wastewater and manure may be applied to fields as a beneficial nutrient source as allowed under the nutrient management plan. Some operations transport manure and process wastewater off-site for others to use.

Contamination of surface and ground water can occur due to improper collection or improper storage of wastes, contamination of storm water runoff, undersized or leaking waste storage facilities, improper timing or over-application of wastes, or improper containment of silage effluent.

Pollutants most commonly associated with animal waste include nutrients (including nitrogen and phosphorus), organic matter, solids, pathogens, and odorous compounds. Animal waste can also be a source of salts and various trace pollutants, including metals, pesticides, antibiotics, and hormones. These pollutants can be released into the environment through discharge or runoff if manure and wastewater are not properly handled and managed.

Nutrients and Dissolved Oxygen

When nutrients such as nitrogen and phosphorus are discharged to surface water, they can cause increased aquatic algae and plant growth. Decomposition of the resulting algae and plants decrease dissolved oxygen levels. In addition, the biochemical oxygen demand of organic waste depletes dissolved oxygen in water. Low dissolved oxygen levels in streams and lakes can cause fish kills in surface waters.

Pathogens

Bacteria, viruses, and protozoa found in animal waste can increase the risk of waterborne diseases. Fecal coliform bacteria are used as a biological indicator to determine if pathogens are probably in the water. In fresh water, high fecal coliform levels can cause a threat to public health, and restrict recreational, industrial, domestic, and agricultural water use. In marine water, high fecal coliform levels necessitate the closure of shellfish beds, causing adverse economic

impact to shellfish growers. High fecal coliform levels in marine water can also restrict recreation in the water.

Nitrogen

Inorganic forms of nitrogen are taken up by plants as nutrients when wastes are applied to cropland. Some nitrogen can be released as ammonia. Excessive or improper application of wastes and improper collection and storage of wastes can cause runoff to surface water or leaching to ground water. High ammonia levels in surface water can be toxic to fish.

Ingestion of high levels of nitrate can cause anemia and, if not treated, death to young infants. Infants are most commonly exposed to high nitrate levels when contaminated drinking water is used to make formula and beverages. Nitrate is considered an "acute contaminant" because short-term exposures to levels above the Maximum Contaminant Level (MCL)[1] can cause methemoglobinemia, a blood disorder, in sensitive individuals (especially young infants). Elevated levels of nitrate may also indicate that the water source is polluted by other contaminants, such as pathogens and pesticides.

The MCL for nitrate [nitrogen] is 10 milligrams per liter (10 mg/l). Unlike most drinking water MCLs, the nitrate MCL is based upon an observed human effect in highly sensitive persons. There is no safety factor incorporated into the standard. In fact, cases of methemoglobinemia are known to have occurred in infants exposed to nitrate concentrations only slightly above 10 mg/l.

"Nitrate is a chemical found in most fertilizers, in manure, and in the liquid waste discharged from septic tanks." "Shallow wells, poorly sealed or constructed wells, and wells that draw from shallow aquifers are at the highest risk of having nitrate-contaminated water."

(Washington State Department of Health, *Nitrates in Drinking Water*, Focus Sheet June, 2004, http://www.doh.wa.gov/ehp/dw/Programs/nitrate.htm, last accessed October 2005)

Frequency of Surface Water Discharge:

Currently, the frequency of discharge varies from facility to facility. Dairies that are covered under their general permit must meet the same no-discharge requirement as contained in this permit. Some other CAFOs have individual permits with varying no-discharge requirements. The discharge frequency of non-permitted facilities varies.

In this permit, the frequency of allowable surface water discharge is:

> *For CAFOs (except new source swine, poultry, and veal Large CAFOs):*
> Discharge of manure, litter, or process wastewater into waters of the state from the production area is prohibited, except when the production area is designed, constructed,

[1] The maximum permissible level of a contaminant in water delivered to any public water system user. Nitrate is generally measured as NO_3-N (nitrate-nitrogen). When measured as nitrate-nitrogen, the MCL is 10 milligrams per liter (mg/l).

operated and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event and precipitation causes an overflow of manure, litter, or process wastewater.

For new source swine, poultry, and veal Large CAFOs:
Discharge of manure, litter, or process wastewater into waters of the state from the production area is prohibited, except when the production area is designed, constructed, operated and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 100-year, 24-hour rainfall event and precipitation causes an overflow of manure, litter, or process wastewater.

A “new source” means a facility that began construction after April 14, 2003.

For all CAFOs:

Discharge of manure, litter or process wastewater in field runoff is prohibited unless applied at agronomic rates. [Agronomic rate as specified in §122.42(e)(1)(vi)–(ix)where the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater.]

Amount of Manure Produced

Table 1 is from *Manure Production and Characteristics, ASAE D384.2 MAR2005*, developed by the American Society of Agricultural Engineers, hq@asae.org developed updated March 2005. The table shows how much manure, BOD, COD, solids, nitrogen, phosphate, potassium and calcium, are typically produced by different animals. The table is for general background information only.

Table 1. Livestock manure production and properties
Source: Adapted from American Society of Agricultural Engineers ASAE D384.1 and Midwest Plan Service MWPS-18

		Wet Raw Manure[a]					BOD[b]	COD[c]	Total Solids		Volatile Solids
Animal	Weight, lb	lb/day	ton/yr	gal/day	cu ft/day	MC,[d]%	lb/day	lb/day	lb/day	ton/yr	lb/day
Dairy Cow	1400	120	22	14.3	1.9	87	2.2	15.4	16.8	3.0	14.0
Dairy Heifer	1000	86	15.7	10.2	1.4	87	1.6	11.0	12.0	2.2	10.0
Beef Stocker	500	29	5.3	3.5	0.5	88	0.8	3.9	4.3	0.78	3.6
Beef Feeder	1000	58	11[e]	6.9	1.0	88	1.6	7.8	8.5	1.55	7.2
Beef Cow		63	11.5	7.5	1.0	88	1.7	8.5	9.2	1.68	7.8
Horse	1000	51	9.3	6.0	0.8	80	1.7		15.0	2.70	10.0
Nursery pig	35	2.9	0.54	0.35	0.047	91	0.11	0.29	0.39	0.07	0.30
Growing pig	65	5.5	1.00	0.65	0.089	91	0.20	0.55	0.72	0.13	0.55
Finishing pig	150	12.6	2.30	1.50	0.20	91	0.47	1.26	1.65	0.30	1.28
	200	16.8	3.07	2.00	0.27	91	0.62	1.68	2.20	0.40	1.70
Gestating sow*	275	11.6	2.11	1.38	0.19	91	0.43	1.16	1.51	0.28	1.17
Sow and litter	375	31.5	5.75	3.75	0.51	91	1.16	3.15	4.13	0.75	3.19
Boar*	350	14.7	2.68	1.75	0.24	91	0.54	1.47	1.93	0.35	1.49

Sheep Feeder	100	4	0.73	0.48	0.06	75	0.12	1.10	1.10	0.20	0.92
Laying Hen	4	0.26	0.047	0.030	0.004	75	0.013	0.044	0.064	0.012	0.048
Broiler	2	0.17	0.031	0.020	0.003	75	0.002	0.032	0.044	0.008	0.034

[a]Bulk density of raw manure is about 32 cu ft/ton, or 62 lb/cu ft, or 8.4 lb/gal with no flushing or wash water.
[b]Five-day biochemical oxygen demand.
[c]Chemical oxygen demand.
[d]Moisture content.
[e]Evaporation and decomposition reduce feedlot manure in dry climates to 1 to 2 tons of 50% moisture content manure for a 150- to 180-day feeding period.
*For gestating sows and boars that are limit fed, the Midwest Plan Service recommends using hog feeder data prorated according to weight and divide by 2.

Table 2. Fertilizer nutrients in fresh manure[a]

Source: Adapted from American Society of Agricultural Engineers ASAE D384.1 and Midwest Plan Service MWPS-18

Animal	Weight, lb	Total Nitrogen		Phosphate[b]		Potash[c]	
		lb/day	lb/yr	lb/day	lb/yr	lb/day	lb/yr
Dairy Cow	1400	0.63	230	0.302	110	0.490	179
Dairy Heifer	1000	0.45	164	0.216	79	0.350	128
Beef Stocker	500	0.17	62	0.106	39	0.126	46
Beef Feeder	1000	0.34	124	0.211	77	0.252	92
Beef Cow		0.36	131	0.221	81	0.266	97
Horse	1000	0.30	110	0.162	59	0.301	110
Nursery pig	35	0.018	6.6	0.0144	5.3	0.012	4.5
Growing pig	65	0.033	12	0.0268	9.8	0.023	8.3
Finishing pig	150	0.079	29	0.063	23	0.052	19
	200	0.104	38	0.082	30	0.071	26
Gestating sow*	275	0.071	26	0.057	21	0.049	18
Sow and litter	375	0.195	71	0.156	57	0.131	48
Boar*	350	0.091	33	0.072	26	0.061	22

Sheep Feeder	100	0.042	15	0.020	7.3	0.039	14
Laying Hen	4	0.0033	1.2	0.0028	1.0	0.0014	0.53
Broiler	2	0.0022	0.80	0.0014	0.50	0.0009	0.35

[a]Manure fertilizer elements are not completely available to plants.

[b]P=0.436 P_2O_5

[c]K=0.830 K_2O

*For gestating sows and boars that are limit fed, the Midwest Plan Service recommends using hog feeder data prorated according to weight and divide by 2.

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Animal Type and Production Grouping	Total solids[3]	Volatile solids[3]	COD[3,4]	BOD[3,4]	Nitrogen	P	K	Ca	Total Manure[5]		Moisture[6]	Assumed Finishing Time Period (days)
	kg / finished animal (f.a.)								kg / f.a.	liter / f.a.	% w.b.	
Beef - Finishing cattle	**360**	**290**	300	67	**25**	**3.3**	17.1	**7.7**	4,500	4,500	92	153
Poultry - Broiler	**1.3**	0.95	1.05	0.30	**0.053**	**0.016**	**0.031**		4.9	4.9	74	48
Poultry - Turkey (male)	**9.2**	7.4	8.5	2.4	**0.55**	**0.16**	0.26		36	36	74	133
Poultry - Turkey (females)	**4.4**	3.5	4.0	1.1	**0.26**	**0.074**	0.11		17	17	74	105
Poultry - Duck	**1.7**	1.0	1.4	0.28	**0.062**	**0.022**	0.031		6.5	6.5	74	39
Swine - Nursery pig (12.5 kg)	4.8	4.0	4.4	1.5	**0.41**	**0.068**	0.16		48	48	90	36
Swine - Grow-finish (70 kg)	**56**	45	47	17	4.7	**0.76**	2.0		560	560	90	120
	lb / finished animal (f.a.)									ft^3 / f.a.	% w.b.	
Beef - Finishing cattle	**780**	**640**	670	150	**55**	**7.3**	38	**17**	9,800	160	92	153
Poultry - Broiler	**2.8**	2.1	2.3	0.66	**0.12**	**0.035**	**0.068**		11	0.17	74	48
Poultry - Turkey (male)	**20**	16	19	5.2	**1.2**	**0.36**	0.57		78	1.3	74	133
Poultry - Turkey (females)	**9.8**	7.8	8.8	2.4	**0.57**	**0.16**	0.25		38	0.61	74	105
Poultry - Duck	**3.7**	2.2	3.0	0.61	**0.14**	**0.048**	0.068		14	0.23	74	39
Swine - Nursery pig (27.5 lb)	10	8.7	9.7	3.4	**0.91**	**0.15**	0.35		87	1.4	90	36
Swine - Grow-finish (154 lb)	**120**	99	104	38	**10**	**1.7**	4.4		1200	20	90	120

G. Effluent Limitations

Effluent limitations are in S1 of the permit. The surface water effluent limitations (S1.A of the permit) do not allow violations of the water quality standards and limit discharges to heavy precipitation events. The ground water effluent limitations are based on not allowing a reduction in the quality of the ground water except in cases spelled out in S1.B of the permit. The effluent limitations are designed to not cause impairments of beneficial uses.

Additional conditions are based on federal requirements and are found in S1.C of the permit. They include recordkeeping, transferring of manure, reporting requirements, setbacks, and other requirements.

To help clarified what constitutes a transfer of manure, we adding this definition to the permit:

> "The transfer of manure, litter or process waste water it other persons when the receiving facility is in direct control of:
>
> a. the application acreage; and
> b. the application rate; and
> c. the application times; and
> d. the transfer rate and time"

All CAFOs must implement an approved written nutrient management plan (condition S3) as required in the federal rules. The nutrient management plan protects water quality and applies to both the production area and the land application. Nutrient management plans provide details about how livestock production wastes are handled including manure and process wastewater collection, storage, and transfer; production area management; land application; testing; record keeping; etc.

To help clarify what constitutes a transfer of manure, we added this definition to the permit:

> "The transfer of manure, litter or process waste water to other persons when the receiving facility is in direct control of:
>
> a. the application acreage; and
> b. the application rate; and
> c. the application times; and
> d. the transfer rate and time"

H. Applicable Water Quality Standards

Applicable surface water quality standards include fecal coliform, dissolved oxygen, pH, temperature and ammonia. Protected uses include water supply; stock watering; fish, shellfish and crustacean migration, rearing, spawning and harvesting; wildlife habitat; recreation; commerce; and navigation (Chapter 173-201A WAC).

Violations of the surface water quality standards

Condition S1.A of the permit has surface water effluent limitations. It states that discharge of manure, litter, or process wastewater into waters of the state from the production area is prohibited, except when the production area is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event and precipitation causes an overflow of manure, litter, or process wastewater. For new source swine, poultry, and veal Large CAFOs, it is the same effluent limitation except it is a 100-year, 24-hour rainfall event.

The Second Circuit Court ruled that field runoff of manure, litter and process wastewater from a CAFOs field application is prohibited unless applied at agronomic rates.
If field applications were in accordance with agronomic rates, field runoff would qualify for the agricultural stormwater exemption granted in the Clean Water Act. However, to qualify for the exemption, field application records are required. Without proper records, the agricultural stormwater exemption may not apply.

Additionally, the permit says that any discharge in compliance with S1.A must not cause or contribute to a violation of the water quality standards in the receiving water. All discharges must be minimized by the CAFO to the greatest extent possible.

Generally, during these discharge events that may cause violations of water quality criteria, Ecology would use its enforcement discretion. The enforcement discretion would consider the impacts to the receiving water after mixing and the threat to human health. Ecology's main focus during these extreme rainfall events is to work with CAFOs to eliminate or minimize pollution to the maximum extent feasible.

How is Antidegradation Tier I met?

The water quality standards (WAC 173-201A) have Antidegradation requirements. The Tier I requirements can be found in WAC 173-201A-310. This permit meets the Tier I requirements by:

- eliminating surface waters discharges (except in the rainfall events described in S1.A) and
- requiring that any discharge in compliance with S1.A must not cause or contribute to a violation of the water quality standards in the receiving water.

Pollutants expected in association with these discharges should not exceed average-based criteria or build up to harmful levels in surface waters during these short-term and infrequent events. Ecology's focus is to work with CAFOs to eliminate or minimize pollution during these extreme rainfall events.

Antidegradation Tier II

The Tier II requirements can be found in WAC 173-201A- 320. The primary way this permit meets the Tier II requirements is by eliminating surface waters discharges (except in the rainfall events described in S1.A). Tier II requires that any degradation caused by a source is found in advance to be both necessary and the overriding public interest. These findings, however, apply only to discharges that cause more than a measurable degradation of water quality. In the case of the CAFO permits, no degradation is allowed except where extreme and highly infrequent precipitation events occur. Even during these events, it is not clear that the CAFOs will cause a measurable increase in bacterial concentrations to the waterbody; although, such a small increase is certainly likely. This exceedance event was selected to represent a precipitation event that would cause even the best control practices to potentially fail, and in essence represents an uncontrollable event. Thus, the permit allows degradation only when necessary.

Antidegradation Tier III

As of the issuance date of this permit, there are no Tier III waters in the state. If a Tier III water body was designated in the water quality standards in the future, a new CAFO on that water body would need to obtain an individual permit and meet the requirements of WAC 173-201A-330.

Groundwater

Chapter 173-200 WAC defines the state's antidegradation policy for groundwater. This rule also contains narrative ground water standards and numeric criteria for nitrate and other contaminants. This rule uses the antidegradation policy, narrative standards and numeric criteria to protect all existing and future beneficial uses of groundwater. Generally, these uses are protected at levels better than those provided for in the criteria. If it is determined to be in the overriding public interest and all known, available, and reasonable treatment (AKART) has been applied before contaminants enter groundwater, degradation of existing and future beneficial uses may be allowed on a case-by-case basis.

I. Summary of Conditions

S1. Effluent Limitations
- Surface water effluent limitations
- Ground water effluent limitations
- Other requirements (record keeping, reporting, etc.)

S2. Permit Coverage
- General permit coverage, individual permit coverage, and definitions

S3. Nutrient Management Plans
- Plan elements, compliance, updates, and availability

S4. Record Keeping, Reporting and Environmental Monitoring
S5. Waste Storage Facilities
S6. Prevention of System Overloading
S7. Termination of Coverage
G1-20. General Conditions

J. Legal and Technical Grounds

How does the permit meet technology-based requirements, water quality-based requirements, the surface water quality standards, the ground water quality standards, and the sediment standards?

Technology-Based Requirements

The State Water Pollution Control Act, RCW 90.48.010, requires the "...use of all known, available, and reasonable methods by industries and others to prevent and control the pollution of the waters of the State of Washington."

The Federal Clean Water Act (CWA) of 1972 set forth various levels of treatment that must be achieved by dischargers by specific dates. Treatment standards for concentrated animal feeding operations are specified in 40 CFR Part 412. These technologies form the basis for federal effluent limitations and are defined as best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT). By July 1, 1984, dischargers were required to achieve compliance with effluent limitations representing the application of best available technology economically achievable (BAT).

The technology-based requirements of the permit are addressed primarily in S1 (Effluent Limitations) and S3 (Nutrient Management Plans).

Condition S1.A prevents discharges to surface waters except in certain rainfall events. These effluent limitations are from 40 CFR 412 and apply to all CAFOs. Condition S1.B protects

ground water by requiring "all known, available, and reasonable methods of prevention, control and treatment." They also apply to all CAFOs. Additional effluent limitations are in S1.C, and they apply to certain CAFOs.

Condition S3 requires each CAFO to implement a nutrient management plan. The nutrient management plans require best management practices and ensure that the other requirements of the permit are met. The nutrient management plan applies to both the production area and the land application area. The nutrient management plans must conform to the United States Department of Agriculture Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG) or equivalent best management practices. The FOTGs are designed to protect water quality. Equivalent best management practices may be used by the CAFO if
(a) They result in equal or better protection of surface and ground water quality and
(b) They are approved by the permitting agency.

WSDA will develop the process to evaluate the effectiveness of proposed equivalent best management practices. That process will consider all available scientific data and will include an opportunity for public participation.

The requirements in S1 and S3 meet or exceed the federal effluent limitation guidelines (see 40 CFR 122 and 412). The federal guidelines are a minimum requirement that specifically address only surface water protection. Washington State is also required to protect waters of the state, which includes surface water and ground water. The federal guidelines do not address the requirement of meeting water quality standards, a task left up to the state issuing the water quality permit.

Water Quality-Based Requirements and Standards

Surface Water:
Condition S1.A prevents discharges to surface waters except in certain rainfall events. Preventing surface water discharges will protect sediments. The permit also states that "discharges to waters of the state may not cause or contribute to a violation of the water quality standards in the receiving water."

Ground Water:
Condition S1.B prevents discharges to ground waters except in certain circumstances. The permit also states that "discharges may not cause or contribute to a violation of the State Ground Water Quality Standards…."

Nutrient Management Plans

For the existing number of animals all operations must have a current and approved nutrient management plan on site. The Federal 2nd Circuit Court decision established that nutrient management plans required by the permit must be available for public review.

Environmental Monitoring

The environmental monitoring requirements are designed to show the ground water is being protected at Large CAFOs. The environmental monitoring requirements for Large CAFOs are in S4.C of the permit.

Ecology is required by RCW 90.48 to protect the water quality of all waters of the state including underground waters. Studies have shown that CAFOs, as well as other activities, have impacted ground water quality in Washington. Portions of the Columbia Basin, Yakima Valley, Nooksack Valley and other areas have nitrate levels in ground water that are higher than the ground water quality standards and drinking water standards. Private water supply wells have been impacted. Nitrate contributions from all sources (including CAFOs) must be reduced to resolve this contamination problem and protect water quality.

Monitoring of soil nitrate-N levels in land application areas is proposed as a lower cost alternative to direct ground water monitoring which will demonstrate whether the nutrient management plan is protecting ground water quality. The monitoring data is important information for the state and will help the permitting agency develop the next CAFO permit in five years.

If a CAFO wishes to use ground water monitoring to directly demonstrate that the operation does not degrade ground water quality, a ground water monitoring program that meets the standards of Chapter 173-200 WAC, Water Quality Standards for Ground Waters of the State of Washington may be substituted for soil monitoring. (Additional information on ground water monitoring can be found in Ecology's publication: "Implementation Guidance for the Ground Water Quality Standards," April 1996, Publication #96-02.)

The goal is for soil monitoring results to be below 30 ppm N. Nitrate-N concentrations higher than 30 ppm N indicate very high levels and may indicate an increased risk of nutrients leaching to ground water (Ecology publication: "Biosolids Management Guidelines for Washington State," July 2000, Publication #93-80).

The Department of Ecology and Department of Agriculture will consider nitrate-N concentrations and other relevant factors when determining if a CAFO poses a high threat to ground water.

Surface Water Monitoring

During an inspection or follow-up on a complaint of a CAFO, WSDA inspectors sample surface waters if a manure discharge is noticed or a high potential to discharge is observed. Examples of discharges include the over applications of manure, livestock in streams, manure line leaks, and overflowing lagoons. In most cases, WSDA inspectors will sample at three locations: above stream, down stream and at the entry of the discharge (or potential discharge). These procedures will vary somewhat depending on the location of the discharge (or potential discharge) and stream flows. Currently, surface water sampling is conducted on a on case-by-case bases with

the determination being made by the inspectors. Most water samples are tested only for fecal coliform.

K. Dilution Zone

This permit does not authorize dilution or mixing zones.

L. Compliance Schedule

The permit does not authorize compliance schedules. However, according to Federal Rule, CAFOs do not need to implement the nutrient management plans until July 31, 2007.

M. Disposal of Residual Solids

Nutrients may be land applied only according to the requirements of each operation's nutrient management plan (see condition S3). Record keeping requirements, and other related requirements, are in S1.C.

N. Finalizing the Permit

The Department of Ecology based the permit on the federal requirements for CAFOs, the Federal Second Circuit Court decision, and on state laws and regulations. We wrote the permit after receiving input from a Permit Advisory Committee and comments from two public comment periods.

The Permit Advisory Committee includes the regulated community, government agencies, and environmental organizations. The two public comment periods held in different geographic areas throughout the state. We have reviewed and responded to all the comments and placed them in a document called 'Response to Comments.'

The general permit, fact sheet, response to comments, and related documents are on file and may be inspected and copied between the hours of 8:00 a.m. and 4:30 p.m., weekdays, at the following Department of Ecology offices:

Headquarters / Southwest Regional Office
300 Desmond Drive
Lacey, WA 98503

Central Regional Office
15 West Yakima Ave -- Suite 200
Yakima, WA 98902-3452

Northwest Regional Office
3190 - 160th Ave. SE
Bellevue, WA 98008-5452

Eastern Regional Office
N. 4601 Monroe
Spokane, WA 99205-1295

Bellingham Field Office
1204 Railroad Avenue, Suite 200
Bellingham, WA 98225

Vancouver Field Office
2108 Grand Boulevard
Vancouver, WA 98661-4622

All of the information is also available on the Department of Ecology's web site at www.ecy.wa.gov/programs/wq/permits/cafo. You can also contact us and request to have copies mailed.

You can appeal the CAFO General Permit. Appeals of the general permit must be within 30 days of issuance or receipt whichever is later. The procedures and requirements for the appeal process are explained in RCW 43.21.B310. ("RCW" is the Revised Code of Washington).

Any appeal must:

Contain a copy of the permit

Your appeal must be filed with:

The Pollution Control Hearings Board
4224 - 6th Avenue SE, Rowe Six, Bldg. 2
P.O. Box 40903
Lacey, Washington 98504-0903

Your appeal must also be sent to:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, Washington 98504-7608

In addition, please send a copy of your appeal to:

Department of Ecology
Kevin Hancock, Water Quality Program
PO Box 47600
Olympia, WA 98504-7600

You can also appeal the terms and conditions of this general permit for an individual discharger. The appeal also must be within 30 days of the effective date of coverage. The appeal is limited to the general permit's applicability or non-applicability to a specific discharger.

O. Economic Impact Analysis

The purpose of this economic impact analysis is to determine the costs of the proposed CAFO general permit on small businesses, and to "reduce the economic impact" when it is legal and feasible. The proposed CAFO general permit only imposes small additional compliance costs on the permitted facility. Table 1 shows the approximate state only costs that the proposed permit could impose on facilities.

Table 1. State Only Costs of the Proposed Permit*

		State Only Annual Permit Cost per Facility (over the next five years)
Beef	Large CAFO	$0-$94.83
	Medium CAFO	$0-$168.36
Dairy	Large CAFO	$0-$25.41
	Medium CAFO	$0-$50.12
Chicken	Large CAFO	$0-$94.83
	Medium CAFO	$0-$27.54

* The costs listed are limited to the costs from those state requirements above the corresponding federal requirements.
CAFOs and Medium animal feeding operations only need to be permitted if they discharge pollutants. Small and some medium animal feeding operations only need to be permitted when designated.

Ecology encourages CAFOs, and AFO operations to make the changes necessary to avoid needing a permit.

In accordance with WAC 173-226-120, the following compliance costs associated with a general permit shall not be included in the economic impact analysis: (a) The costs necessary to comply with chapters 173-200, 173-201, 173-204, and 173-224 WAC; and (b) The costs associated with requirements of the general permit which result from conformity or compliance, or both, with federal law or regulations.

The entire Economic Impact Analysis is available on the Department of Ecology's web site at www.ecy.wa.gov/programs/wq/permits/cafo.

P. Frequently Asked Questions

1. Is groundwater monitoring required in the permit?

No. In an earlier draft of the permit, Ecology had considered having groundwater monitoring for large CAFOs. This requirement was removed. See Section J of the fact sheet for more information on the environmental monitoring requirement for large CAFOs.

To help identify manure storage lagoons that leak, we expanded the maintenance requirements found in S5. Facilities must now develop a way to anticipate the manure level in their lagoons. If there is a discrepancy between anticipated and observed levels, they must investigate and report leaks to the Department.

2. Does the permit require the use of Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG)?

The permit requires the nutrient management plan to conform to the FOTGs or equivalent best management practices. An equivalent best management practice is an operational, source control, treatment or innovative practice, which results in equal or better protection of waters of the state.

3. What about facilities with individual permits?

Condition S2.B2 of the permit states:

> This general permit does not cover activities or discharges covered by an individual National Pollutant Discharge Elimination System (NPDES) or state waste discharge permit until the individual permit has expired or been canceled. Any person conducting an activity covered by an individual permit that may be covered by this general permit may request coverage under this general permit.

However, facilities cannot be covered under the general permit if it would violate the anti-backsliding provision. This is a provision in the federal regulations (40 CFR 122.44(l)) which says a reissued permit must be as stringent as the previous permit with some exceptions.

In other words, if a facility currently has an individual permit that is more stringent than the general permit, it usually must keep the individual permit.

According to 40 CFR 122.44(l):

> Except as provided in [40 CFR 122.44(l)(2)] when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62.)

4. What happens if a facility is required to apply for an individual permit?

In cases where the department requires any discharger to apply for an individual permit, the discharger will be notified in writing that another permit is required. This notice will include a statement of why another permit is being required, an application form, and a time limit for submitting the application.

The CAFO general permit addresses the discharge of process wastewater. Some facilities have additional processing, such as milk bottling and egg washing. These additional processes may, under some circumstances, be covered under this general permit. Because advanced processing is uncommon and because each facility is different, Ecology will determine on a case-by-case basis if this general permit is adequate for the facility. As a result, an individual permit (S2.C) may be required for some facilities. Similarly, there are facilities that already have other types of individual permits for additional processing, but could be required to seek coverage under the CAFO general permit. These facilities should work with Ecology to determine the type of permit required for their facility.

5. What are the public notice requirements for new operations?

The public notice requirements from WAC 173-226 130(5) are:

For new operations, or for operations previously under permit for which an increase in volume or change in the character of the effluent is requested over that which was previously authorized, only:

a. The applicant for coverage under a general permit shall cause notice to be circulated within the geographical area of the proposed discharge. Such circulation shall include:
   (i) Publishing twice a notice in a newspaper of general circulation within the county in which the discharge is proposed to be made; and
   (ii) Any other method the department may direct.

b. The notice published pursuant to (a) of this subsection shall contain:
   (i) The name, address, and location of the facility requesting coverage under the general permit;

(ii) The applicant's activities or operations that result in a discharge (e.g., storm water, fish farming, gravel washing);
(iii) The name of the general permit under which coverage is being requested; and
(iv) The statement: "Any person desiring to present their views to the department of ecology regarding this application may do so in writing within thirty days of the last date of publication of this notice. Comments shall be submitted to the department of ecology. Any person interested in the department's action on this application may notify the department of their interest within thirty days of the last date of publication of this notice."

6. What if I don't get the General Permit Coverage?

Any animal feeding operation required to be covered under this permit that has not obtained coverage is in violation of the State Water Pollution Control Act (Chapter 90.48 RCW) and the Federal Clean Water Act, and will be subject to the possible enforcement sanctions provided in these acts for unlawfully operating without a permit.

7. Can a facility volunteer to be covered by the permit?

Any animal feeding operation that is not required to obtain permit coverage under this permit may voluntarily elect to do so in exchange for the benefits of permit coverage.

8. What are the permit fees?

The Department of Ecology is authorized by state law to adopt rules to fund the operation of the Water Quality Wastewater and Stormwater Discharge Permit Programs.

Fee-eligible activities include:

- Processing permit applications and modifications;
- Monitoring and evaluating compliance with permits;
- Conducting inspections;
- Securing laboratory analysis of samples taken during inspections; and
- Supporting the overhead expenses that are directly related to these activities.

Permit fees are paid by holders of federal and state wastewater and stormwater discharge permits issued by Ecology. Funding for the permit program was initially paid for by citizens through state general revenues appropriated by the Washington State Legislature and federal grants. In 1988, voters passed Initiative 97 (now codified as RCW 90.48.465) requiring holders of wastewater discharge permits to pay annual fees for discharging into waters of the state. Fees paid by holders of wastewater and stormwater discharge permits are deposited into a dedicated account.

The permit fee amounts are set in WAC 173-224 Wastewater Discharge Permit Fees; they are not set in the general permit. The most recent revisions to WAC 173-224 were adopted on July 12, 2004 and went into effect on August 13, 2004. The FY 2005 fees for CAFOs are 3.03% higher than the FY 2004 fees. This increase is based on inflation.

Non-Dairy CAFOs	FY 2005 Annual Permit Fee	FY 2006 Annual Permit Fee
< 200 Animal Units	$145	$149
200 - < 400 Animal Units	$362	$371
400 - < 600 Animal Units	$725	$744
600 - < 800 Animal Units	$1,087	$1,115
800 Animal Units and greater	$1,451	$1,489

Dairies: $0.50 per animal unit not to exceed $1,015 for FY 2005 and $1,042 for FY 2006 and beyond.

Definition of an "Animal Unit"(from WAC 173-224, the Permit Fee rule):

Animal Type	Number of Animals per Animal Unit
Dairy Cows	
Jersey Breed	
Milking Cow	0.900
Dry Cow	0.900
Heifer	0.220
Calf	0.220
Other Breeds	
Milking Cow	1.400
Dry Cow	1.000
Heifer	0.800
Calf	0.500
Feedlot Beef	0.877
Horses	0.500
Sheep	0.100
Swine for breeding	0.375
Swine for slaughter	0.110
Laying hens and pullets > 3 months	0.004
Broilers and pullets < 3 months	0.002

For those CAFOs not listed on the above table, the department will use 1,000 pounds of live animal weight and the weight of the type of animal in determining the number of animal units.

9. How long will terminating coverage take?

Condition S7 of the permit allows CAFOs to terminate permit coverage in certain circumstances as outlined in the permit. After the request to terminate coverage is sent to Ecology, Ecology will provide a written response to the permittee stating if the request for terminating coverage was accepted or denied within 45 days.

10. What about duck facilities?

An existing duck facility may be able to have less-stringent effluent limitations under federal regulations. An individual permit would need to be issued for an operation wishing to be permitted under those less-stringent effluent limitations. New duck facilities must meet the more-stringent effluent limitation identical to other animal types under the federal regulations.

Duck, horse, and sheep operations have some less-stringent requirements in the permit (such as recording keeping requirements in S4.A). These less-stringent requirements come from the less-stringent federal regulations found in 40 CFR 412.

11. Why is this an NPDES and state waste discharge permit?

As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The U.S. EPA is requiring states to issue NPDES permits to all CAFOs that discharge or propose to discharge to surface waters.

The state waste discharge part of the permit covers all waters of the state, including ground water. State Law (RCW 90.48.160) requires: "Any person who conducts a commercial or industrial operation of any type which results in the disposal of solid or liquid waste material into the waters of the state… shall procure a permit" from the Department of Ecology.

The Washington State Department of Ecology is delegated to issue NPDES permits and is authorized under state law to issue state waste discharge permits. Therefore, this permit is a joint permit.

12. What is the "overriding public interest" in S1.B1 of the permit?

Overriding public interest must be demonstrated through a public notification procedure where the public will be notified and they will be invited to comment. This involves notifying the public and affected parties of the benefits of the activity as well as the reasons that the discharge will not maintain background water quality. Based on the comments submitted and the issues raised, Ecology will determine if the discharge is in the overriding public interest. If it is determined that it is not in the overriding public interest then Ecology will work with the facility

to develop alternate mitigative measures that will address the public concerns. If mitigation is not possible, then the discharge will not be allowed.

Overriding public interest must be demonstrated through one of the following ways. There must be (1) an alleviation of a public health concern, (2) a net improvement to the environment, or (3) socioeconomic benefits to the community.

See *Implementation Guidance for the Ground Water Quality Standards*, April 1996, Department of Ecology publication number 96-002 for more information.

13. How is the 25- or 100-year, 24-hour rainfall event determined?

The "25-year (or 100-year), 24-hour rainfall event" means a rainfall event with a probable recurrence interval of once in 25 years (or 100 years) as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States", May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

Maps of those rainfall events are available from the Western Regional Climate Center at http://www.wrcc.dri.edu/pcpnfreq/. These maps show how many inches of rain would be needed to meet the rainfall event. Tables showing rainfall over the last 24 hours for different cities in Washington are available at http://www.wrcc.dri.edu/state_climate.html.

14. If an operation is covered by this permit, is it exempted from SEPA requirements?

No. CAFOs must still comply with the State Environmental Policy Act (SEPA) requirements and all applicable federal, state, and local statutes, ordinances, and regulations.

15. Besides the permit, what are some other ways to address pollution problems?

Ground Water Management Areas

Ground Water Management Areas (GWMAs) may be used in some areas to address widespread ground water issues. GWMAs are authorized by state law (RCW 90.44.400), which states in part:

The Department of Ecology, in cooperation with other state agencies, local government, and user groups, shall identify probable ground water management areas or sub-areas…. The criteria to guide identification of the ground water areas or sub-areas shall include but not be limited to, the following:

a. Aquifer systems that are declining due to restricted recharge or over-utilization;

b. Aquifer systems in which over-appropriation may have occurred and adjudication of water rights has not yet been completed;
c. Aquifer systems currently being considered for water supply reservation under chapter 90.54 RCW for future beneficial uses;
d. Aquifers identified as the primary source of supply for public water supply systems;
e. Aquifers designated as a sole source aquifer by the federal environmental protection agency; and
f. Geographical areas where land use may result in contamination or degradation of the ground water quality.

There are two active Ground Water Management Act areas (GWMA) in Washington:

1. Columbia Basin
2. South King County.

There are also inactive GWMAs in Blaine, Island County, Snohomish County, King County (five total),

1. Clovers-Chambers,
2. Gig Harbor,
3. Clark County,
4. The Methow,
5. Deer Park.

Surface Water Cleanup Plans

The Total Maximum Daily Load (TMDL) or Water Cleanup Plan process is established by Section 303(d) of the Clean Water Act. Federal law requires states to identify sources of pollution in waters that fail to meet state water quality standards, and to develop Water Cleanup Plans to address those pollutants. The Water Cleanup Plan establishes limits on pollutants that can be discharged to the waterbody and still allow state standards to be met.

16. What biosecurity measures do WSDA inspectors use?

Biosecurity controls are meant to minimize the risk of disease introduction and spread and can vary greatly according to type of operation and type of site visit.

The minimum biosecurity measures for WSDA inspectors are:

- Anyone visiting an animal enterprise will avoid livestock areas, pens, barns, etc., unless it is necessary to complete the goal of the visit.
- Vehicles are parked on paved or concrete areas, away from farm production sites whenever possible to avoid contact with dirt, mud, manure or other debris.
- Vehicle traffic passing on other than paved or concrete areas will be confined to areas that are considered common i.e.: driveway used by milk truck for collection of milk. When this is not possible, the vehicles are thoroughly cleaned to be certain that tires, wheels, undercarriage and wheel wells are free from dirt and debris. One way to properly clean the vehicle would be to hose off the vehicle areas before leaving the premises. If this does not clean the tires adequately, a pressure car wash must be used.
- Anyone visiting an animal agriculture enterprise will wash their hands with soap and water or an antibacterial gel before entering and after leaving the premises to avoid transmitting disease agents from person to person.
- WSDA Inspectors use clean, disinfected boots for each site visit. According to policy they, clean their boots with a disinfectant prior to placing them in their vehicle.

17. What about air quality?

There are concerns about the effects of CAFOs on air quality, and many CAFOs have been working to minimize their impact on air quality. This general permit only addresses water quality issues. However, it is important that the requirements of this water quality permit do not hinder efforts to improve air quality.

For more information, please read "Fugitive Dust Control Guidelines for Beef Cattle Feedlots and Best Management Practices." It is available on the Department of Ecology's website at www.ecy.wa.gov/programs/wq/permits/cafo.

Appendix 1

Numbers of Animals for Large and Medium AFOs

An AFO is defined as a **Large AFO** if it stables or confines as many as or more than the numbers of animals specified in any of the following categories:

(i) 700 mature dairy cows, whether milked or dry;
(ii) 1,000 veal calves;
(iii) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
(iv) 2,500 swine each weighing 55 pounds or more;
(v) 10,000 swine each weighing less than 55 pounds;
(vi) 500 horses;
(vii) 10,000 sheep or lambs;
(viii) 55,000 turkeys;
(ix) 30,000 laying hens or broilers, if the operation uses a liquid manure handling system;
(x) 125,000 chickens (other than laying hens), if the operation uses other than a liquid manure handling system;
(xi) 82,000 laying hens, if the operation uses other than a liquid manure handling system;
(xii) 30,000 ducks (if the operation uses other than a liquid manure handling system); or
(xiii) 5,000 ducks (if the operation uses a liquid manure handling system).

An AFO is defined as a **Medium AFO** if it stables or confines the numbers of animals specified in any of the following categories:

(i) 200 to 699 mature dairy cows, whether milked or dry;
(ii) 300 to 999 veal calves;
(iii) 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
(iv) 750 to 2,499 swine each weighing 55 pounds or more;
(v) 3,000 to 9,999 swine each weighing less than 55 pounds;
(vi) 150 to 499 horses;
(vii) 3,000 to 9,999 sheep or lambs;
(viii) 16,500 to 54,999 turkeys;
(ix) 9,000 to 29,999 laying hens or broilers, if the operation uses a liquid manure handling system;
(x) 37,500 to 124,999 chickens (other than laying hens), if the operation uses other than a liquid manure handling system;
(xi) 25,000 to 81,999 laying hens, if the operation uses other than a liquid manure handling system;

(xii) 10,000 to 29,999 ducks (if the operation uses other than a liquid manure handling system); or

(xiii) 1,500 to 4,999 ducks (if the operation uses a liquid manure handling system); and

A) Pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or

B). Pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.